

Claims

What is claimed is:

- [c1] A directory server comprising:
a supplier server;
a consumer server in communication with the supplier server;
a plurality of pluggable services that manage replication of data contained within
the directory server from the supplier server to the consumer server; and
a replica update vector used to determine a minimal set of updates necessary to
synchronize the consumer server with respect to the supplier server;
wherein replication of data is managed using the replica update vector.
- [c2] The directory server of claim 1, wherein the replica update vector is persistently
stored in a directory information tree.
- [c3] The directory server of claim 1, wherein a memory representation of the replica
update vector comprises a change sequence number pending list.
- [c4] The directory server of claim 1, wherein the replica update vector comprises a
change sequence number for each known replica and a description of a latest
update received from a corresponding replica.
- [c5] The directory server of claim 1, wherein the replica update vector is accessed
through an application programming interface.
- [c6] A method of updating a replica update vector, comprising:
requesting a replica update vector from a consumer server;
sending the replica update vector from the consumer server to a supplier server;
comparing the replicate update vector of the consumer server with the replica
update vector of the supplier server; and

sending discrepancies of a comparison from the supplier server as an update to the replica update vector of the consumer server, if a discrepancy exists.

- [c7] The method of claim 6, further comprising, exchanging the replica update vector at the beginning of a replication session.
- [c8] The method of claim 6, wherein the replica update vector is persistently stored in a directory information tree.
- [c9] The method of claim 6, wherein a memory representation of the replica update vector comprises a change sequence number pending list.
- [c10] The method of claim 6, wherein the replica update vector comprises a change sequence number for each known replica and a description of a latest update received from a corresponding replica.
- [c11] The method of claim 6, wherein the replica update vector is accessed through an application programming interface.
- [c12] A method of updating a replica update vector, comprising:
requesting a replica update vector from a consumer server;
sending the replica update vector from the consumer server to a supplier server;
comparing the replica update vector of the consumer server with the replica update vector of the supplier server;
sending discrepancies of a comparison from the supplier server as an update to the replica update vector of the consumer server, if a discrepancy exists; and
exchanging the replica update vector at the beginning of a replication session.
- [c13] An apparatus for updating a replica update vector, comprising:
means for requesting a replica update vector from a consumer server;

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means for sending the replica update vector from the consumer server to a supplier server;

means for comparing the replica update vector of the consumer server with the replica update vector of the supplier server; and

means for sending discrepancies of a comparison from the supplier server as an update to the replica update vector of the consumer server, if a discrepancy exists.

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